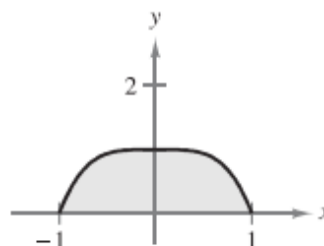


Nos Exercícios 15-22, determine a área da região.

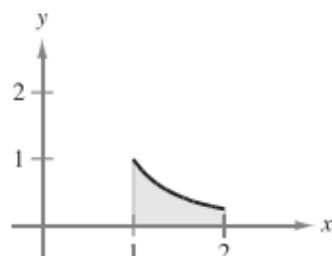
15. $y = x - x^2$



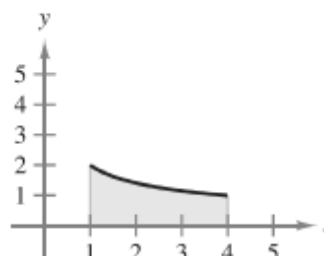
16. $y = 1 - x^4$



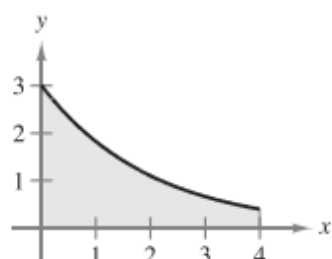
17. $y = \frac{1}{x^2}$



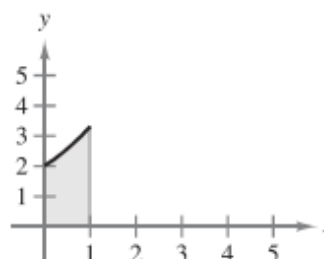
18. $y = \frac{2}{\sqrt{x}}$



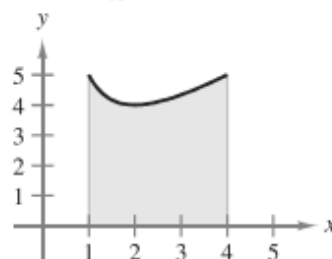
19. $y = 3e^{-x/2}$



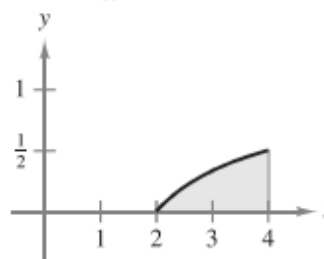
20. $y = 2e^{x/2}$



21. $y = \frac{x^2 + 4}{x}$



22. $y = \frac{x-2}{x}$



Nos Exercícios 23-46, calcule a integral definida.

23. $\int_0^1 2x \, dx$

25. $\int_{-1}^0 (x - 2) \, dx$

27. $\int_{-1}^1 (2t - 1)^2 \, dt$

29. $\int_0^3 (x - 2)^3 \, dx$

31. $\int_{-1}^1 (\sqrt[3]{t} - 2) \, dt$

33. $\int_1^4 \frac{u - 2}{\sqrt{u}} \, du$

35. $\int_{-1}^0 (t^{1/3} - t^{2/3}) \, dt$

37. $\int_0^4 \frac{1}{\sqrt{2x + 1}} \, dx$

39. $\int_0^1 e^{-2x} \, dx$

41. $\int_1^3 \frac{e^{3/x}}{x^2} \, dx$

43. $\int_0^1 e^{2x} \sqrt{e^{2x} + 1} \, dx$

45. $\int_0^2 \frac{x}{1 + 4x^2} \, dx$

24. $\int_2^7 3v \, dv$

26. $\int_2^5 (-3x + 4) \, dx$

28. $\int_0^1 (1 - 2x)^2 \, dx$

30. $\int_2^2 (x - 3)^4 \, dx$

32. $\int_1^4 \sqrt{\frac{2}{x}} \, dx$

34. $\int_0^1 \frac{x - \sqrt{x}}{3} \, dx$

36. $\int_0^4 (x^{1/2} + x^{1/4}) \, dx$

38. $\int_0^2 \frac{x}{\sqrt{1 + 2x^2}} \, dx$

40. $\int_1^2 e^{1-x} \, dx$

42. $\int_{-1}^1 (e^x - e^{-x}) \, dx$

44. $\int_0^1 \frac{e^{-x}}{\sqrt{e^{-x} + 1}} \, dx$

46. $\int_0^1 \frac{e^{2x}}{e^{2x} + 1} \, dx$